

REMARKS

Claims 1-11 were pending in this application when the present Office Action was mailed (April 7, 2006), with claims 8 and 10 withdrawn from consideration. Claim 1 has been amended. Accordingly, claims 1-11 remain pending.

In the April 7, 2006 Office Action, claims 1-7, 9 and 11 were rejected. More specifically, the status of the application in light of this Office Action is as follows:

- (A) The title of the invention was objected to as being not descriptive;
- (B) Claims 1-7, 9 and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,677,566 to King et al. ("King"); and
- (C) Claims 1-7, 9 and 11 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,836,009 to Koon et al. ("Koon").

The undersigned attorney wishes to thank the Examiner for engaging in a telephone interview on July 12, 2006. During the telephone interview, claim 1 and the applied references were discussed. The general terms of a proposed amendment to claim 1 were also discussed. Claim 1 has been amended in accordance with the proposal discussed during the July 12, 2006 telephone interview. The following remarks summarize and expand upon the points made during the telephone interview. Accordingly, applicants respectfully request that this paper constitute applicants' interview summary.

A. Response to the Objection to the Title

The title has been amended consistent with that Examiner's suggestion during the July 12, 2006 telephone interview. Accordingly, the objection to the title should be withdrawn.

B. Response to the Section 102 Rejection on the Basis of King

Claim 1, as amended, is directed to a microfeature device package system that includes a microfeature device, a plurality of device contacts electrically coupled to structures within the microfeature device, and a conductive structure electrically connected to at least one of the

plurality of device contacts. The conductive structure has a plurality of first and second package contacts accessible for electrical coupling to at least one device external to the package. The first package contacts are accessible from a first direction for coupling. The second package contacts are configured to receive solder balls and are accessible from a second (opposite) direction for coupling. The system further includes an encapsulant disposed adjacent to the microfeature device and the conductive structure. The encapsulant has apertures with aperture walls aligned with the second package contacts to contain solder balls carried by the second package contacts. The encapsulant is also positioned against the conductive structure proximate to the first package contacts. The system still further includes individual volumes of solder positioned at individual first and second package contacts. This structure can allow embodiments of the package system to be connected to one or more external devices via the first and second package contacts, in a number of orientations, including in at least some embodiments, an inverted orientation.

The following comments regarding the King and Koon references apply only to the disclosures of these references, and are not intended to characterize or limit in any way the scope of the claims of these references. King discloses a chip package 10 having a semiconductor chip 14 with conductive leads 12 that extend over the semiconductor chip 10 and are bonded to centrally located bond pads 18. The conductive leads 12 have an upwardly facing electrode bond area 34 and outer ends 15 that extend outwardly from an encapsulating material 26 to facilitate chip testing using equipment and techniques presently used to test conventional external lead plastic packages.

King cannot support a Section 102 rejection of claim 1 for at least the reason that King fails to disclose each and every feature of claim 1. For example, assuming for the sake of argument that King's conductive leads 12, outer ends 15 and electrode bond areas 34 correspond at least in part to the conductive structure, first package contacts and second package contacts, respectively, of claim 1, then King's encapsulating material 26 is not "positioned against the conductive structure proximate to the first package contacts," as is included in claim 1. Furthermore, King fails to disclose "individual volumes of solder positioned at individual first . . . package contacts," as is also included in claim 1. Instead, King discloses that the outer ends 15 of the conductive leads 12 are out of contact with the encapsulating material 26. The outer

ends 15 are used during a testing process, which does not appear to include a soldering operation, and are then sheared off and/or encapsulated after testing, as is shown by King at Figures 2 and 3. Accordingly, for at least the foregoing reasons, the Section 102 rejection of claim 1 on the basis of King should be withdrawn.

Claims 2-7, 9 and 11 depend from claim 1. Accordingly, the Section 102 rejections of these claims on the basis of King should be withdrawn for the foregoing reasons and for the additional features of these dependent claims.

C. Response to the Section 102 Rejection on the Basis of Koon

Koon discloses in Figure 10 a package 210 having leads 220 with terminals 226 and exposed lengths 224 that are connected to corresponding bond pads 206a. Assuming for the sake of argument that the exposed lengths 224 correspond at least in part to the first package contacts of claim 1, Koon does not explicitly disclose that the exposed lengths 224 are connected to the bond pads 206a with solder. However, even if one assumes that the exposed lengths 224 are connected to the bond pads 206a with solder, Koon still fails to disclose or suggest at least one additional element of claim 1. For example, Koon fails to disclose or suggest an encapsulant that is "positioned against the conductive structure proximate to the first package contacts." Instead, each external length 224 projects away from the encapsulant 240 at the point where it is connected to a corresponding bond pad 206a. Therefore, for at least the foregoing reasons, the Section 102 rejection of claim 1 on the basis of Koon should be withdrawn.

As discussed above, claims 2-7, 9 and 11 depend from claim 1. Accordingly, the Section 102 rejections of these claims on the basis of Koon should be withdrawn for the foregoing reasons and for the additional features of these dependent claims.

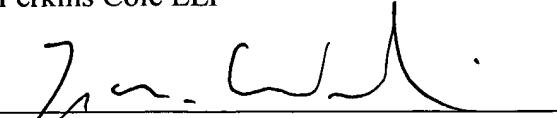
D. Consideration of Withdrawn Claims

In light of the foregoing amendments and remarks, applicants believe that claims 1-7, 9 and 11 are allowable. Accordingly, applicants expressly request consideration of withdrawn claims 8 and 10, as depending from an allowable base claim.

If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned attorney at (206) 359-3257.

Respectfully submitted,

Perkins Coie LLP



John M. Wechkin
Registration No. 42,216

Date: July 17, 2006

Correspondence Address:

Customer No. 25096
Perkins Coie LLP
P.O. Box 1247
Seattle, Washington 98111-1247
(206) 359-8000